

Sub A2
Cont.
B2
003160-4449550
We claim:

1. A ~~satellite broadcasting signal distribution system~~ signal distribution system for distributing television program signals to satellite receivers having a predetermined receive frequency range, the system comprising:

a satellite dish coupled to a low noise block converter that receives polarized television program signals from at least one satellite;

said low noise block converter is coupled to a first means of a first frequency converter coupled to the satellite dish, the first frequency converter converting at least a first plurality of television program signals received ~~vertical polarization signals and horizontal polarization signals or left hand circular polarization signals and right hand circular polarization signals from a~~ the satellite to a frequency range that is at least partially outside of the satellite receive frequency range, the first frequency converter applying said converted first plurality of television program signals and transmitting simultaneously with a second plurality of television program signals received from the satellite via onto a single coaxial distribution cable for enabling to enable two different frequencies and polarities and distinct pluralities of television program signals to be transmitted stacked onto the cable and distributed simultaneously via over said single coaxial cable;

a second means is coupled to said first means;

said second means a second frequency converter coupled to the coaxial cable, the second frequency converter further converting said converted first plurality of television

A2
cond -

008760" E4449560

~~signals to a further frequency range that is within the satellite receiver frequency range; converts said vertical polarization signals and said horizontal polarization signals or said left-hand circular polarization signals and said right-hand circular polarization signals from said first means to its original received state from said satellite dish;~~

~~----- a satellite receiver is coupled to said second means; and~~

~~----- said source is coupled to said satellite receiver, wherein said second frequency converter performs a frequency down-conversion and wherein all of the television program signals within the first plurality of television program signals are received by the satellite dish with a common polarization~~

~~2. A satellite system as in claim 1 wherein a power source is coupled to said first means and said power source powers said first means.~~

~~3. A satellite system as in claim 1 wherein said second means provides for said signals to be converted separately and independently to said satellite receiver by a transmitting means.~~

~~4. A satellite system as in claim 1 wherein said second means provides for a transmitting means for said signal to be selectively converted to said satellite receiver via a first cable coupled to said second means.~~

~~5. A satellite system as in claim 4 wherein said transmitting means further includes a polarity switch for permitting said signals to be selectively converted to said satellite receiver.~~

6. A satellite system as in claim 1 wherein said first means includes a first converting system for converting said signals of a first direction to a desired first frequency and polarization and a second converting system for converting said signals of a second direction to a desired second frequency and polarization.

Sub
B3

7. In a satellite distribution system that distributes received satellite signals to satellite receiver equipment through a distribution cable, said satellite receiver equipment producing a control signal, said satellite distribution system further comprising:

an arrangement coupled between the distribution cable and the satellite receiver, said arrangement including a block converter that frequency-converts a channel block carried by the distribution cable so it can be decoded by said satellite equipment, wherein the output of said block converter is a block of plural channels, said arrangement further including an electrically operated polarity switch coupled to said block converter, said plurality switch operating to select between said frequency-converted channel block and at least one further channel block carried by said distribution cable for application to said satellite receiver in response to said control signal produced by said satellite receiver.

8. A system for distributing received satellite signals via a distribution cable to at least one satellite receiver, said satellite receiver having a frequency range and being coupled to a second end of said distribution cable, said distribution cable also having a first end, said system including:

a satellite dish that receives a first block of plural channels of a first polarization and a second block of plural channels of a second polarization;

a frequency converter coupled to at least said received first block of plural channels, said frequency converter converting at least said first channel block to a

23

frequency band that is at least partially outside of the satellite receiver frequency range;

a combining arrangement coupled to said distribution cable first end, said combining arrangement simultaneously applying said frequency-converted first channel block and said second channel block to said first end of said distribution cable;

a further frequency converter connected to said distribution cable second end, said further frequency converter frequency-converting said first channel block to provide a block of plural channels within the frequency range of said satellite receiver; and

a switch adapted to operate under control of said satellite receiver, said switch switching between said first channel block and said second channel block for application to said satellite receiver.

3/2. The system of claim 2 wherein said further frequency converter comprises a down-converter that down-converts said first channel block to a lower frequency range.

4/2. The system of claim 2 wherein said first-mentioned frequency converter comprises an up-converter that up-converts said first frequency block to a higher frequency for application to said distribution cable.

6/2. The system of claim 2 wherein said switch comprises an electrically operated switch.

12/2. The system of claim 2 wherein said first polarization is different from said second polarization.